

REMARKS

Claims 1-10 are pending in the present application. Reconsideration of this application in view of the following remarks is respectfully requested.

Interview with the Examiner

Telephone conferences were conducted with the Examiner in charge with the above-identified application on August 30, 2005 and September 23, 2005. In the telephone conferences with the Examiner, the Examiner indicated that it was difficult to schedule a personal interview to discuss the present application. However, if an Amendment was submitted, an interview could be scheduled after the filing of the Amendment. In addition, the Examiner indicated that any necessary amendments to the present application would be considered by the Examiner at that time.

In view of the above, it is requested that the Examiner contact the undersigned in order to schedule an interview to discuss the present application prior to acting on the present Reply.

Rejection Under 35 U.S.C. § 103

Claims 1 and 2 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rankin, USPN 5,489,099 in view of Diepold, U.S. Application Publication No. 2002/0041339. Claims 3 and 4-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rankin et al. in view of Yokota et al., USPN 5,905,530. Claims 9 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rankin in view of Diepold as applied to claim 1, and further in view of Yokota et al. as applied in claim 3. These rejections are respectfully traversed.

At the outset, it should be noted that the Diepold reference relied on by the Examiner was published on April 11, 2002. However, this reference has a 35 U.S.C. 102(e) date of October 9, 2001 as of the filing date of the Non-Provisional Application No. 09/971,650 or October 10, 2000 as of the filing date of the Provisional Application No. 60/238,459. It is clear that the Diepold reference has a §102(e) date as of the filing date of the Non-Provisional Application; however, it is not so clear that the Diepold reference has a §102(e) date of the Provisional Application. Applicants' representative would like to discuss this matter with the Examiner during the interview. However, the following comments are also offered for the Examiner's consideration in preparation for the interview.

If the Diepold reference only has a §102(e) date of the Non-Provisional Application, this reference is not available as a reference against the present application. Specifically, a verified translation of the priority document was filed in the present application to perfect the foreign priority of the present application to November 8, 2000, which is prior to the October 9, 2001 filing date of the Non-Provisional Application. Therefore, the Examiner must rely on the disclosure of the Provisional Application to reject the claims of the present application. In other words, the Examiner should look to the disclosure in the Provisional Application in order to determine whether the Examiner's rejection is proper.

Attached hereto for the Examiner's convenience is a copy of the Provisional Application Specification. As can be understood from a review of this document, the specification of the Provisional Application is quite different from the published Diepold application.

First, since the disclosure of the Provisional Application is different from the disclosure in the Diepold reference, Applicants submit that the Examiner has failed to establish a *prima*

facie case of obviousness. Specifically, since the Examiner has not explained that the Provisional Application specification discloses the subject matter relied on by the Examiner, a *prima facie* case of obviousness has not been established by the Examiner.

Second, with regard to the merits of the Examiner's rejection, Applicants submit that the attached Provisional Application is insufficient to disclose the subject matter relied on by the Examiner. Specifically, referring to the specification of the Provisional Application, it appears that this document only discloses a device that illustrates speed lines in a still image from a video (see Figures 1 and 2). There is no indication in the Provisional Application that the still image is magnified, and then the magnified image data used to calculate motion as in independent claim 1 of the present invention.

In addition, it appears that the Examiner is not differentiating magnification and zooming in on an image. Specifically, referring to page 2, paragraph 2, lines 8-12 of the Examiner's Office Action, the Examiner state "[h]owever, such features are well known and used in the prior art of the record as evidenced by Diepold '339 (i.e. page 2, sections 0015 and 0017) where [Diepold '339] teaches highlighting the moving object and using the motion vectors representing the motion of the object in the depicted scene, zooming." However, at this portion of Diepold '339, a selected key frame includes motion vector fields for individual pixels, which are detected in accordance with the disclosure in U.S. Application No. 09/593,521. Applicants submit that the motion vector fields are merely vectors that identify which pixels have moved with respect to a preceding or succeeding frame. The motion vector fields have nothing to do with the magnification process of the presently claimed invention. Applicants representative would also like to discuss this matter further with the Examiner.

Referring to paragraph [0015] of Diepold '339, it is stated "[t]he motion vectors may represent the motion of objects within the depicted scene or they may represent the motion of the camera, such as when the camera is panned or zoomed in or out." In addition, page 2, last line of the Examiner's Office Action states "highlighting/magnifying." In view of this, it appears that the Examiner considers the highlighting or zooming described in Diepold '339 to be the magnification of the presently claimed invention. Applicants representative would like to discuss with the Examiner the position that the highlighting or zooming disclosed in Diepold '339 is sufficient to teach the magnification process of the presently claimed invention.

With regard to independent claims 3 and 6, the Examiner relies on the combination of Rankin et al. and Yokota et al. The Examiner recognizes that the Rankin et al. reference fails to disclose a calculating section for correcting a coordinate error as recited in independent claims 3 and 6 of the present invention. However, the Examiner relies on the Yokota et al. reference in order to modify Rankin et al. to arrive at the presently claimed invention.

As was previously explained in the Request for Reconsideration dated March 21, 2005, Applicants do not believe that the Yokota et al. reference makes up for the deficiencies of Rankin et al. Referring to Yokota et al., this reference discloses an image pickup apparatus that corrects distortion of an image due to an objective lens. However, the Yokota et al. reference is not directed to a camera, which is used for measuring ball motion as recited in independent claims 3 and 6 of the present invention. In view of this, there is no indication in Yokota et al. that a coordinate error is calculated for only an object (ball image) in an original image. In addition, there is no indication in Yokota et al. that this correction data is used to calculate "true coordinates" of the object (ball image) in the original image as recited in independent claim 3.

At page 5 of the Examiner's Office Action, the Examiner provides a response to the above arguments. Applicants representative would like to discuss this with the Examiner. First, it does not appear that the Examiner understands that the correction of the error is of "only a ball image in the original image" as recited in claims 3 and 6. Second, the Examiner states on page 5, first full paragraph that the use of the correction data is not recited in claims 3 and 6. However, claims 3 and 6 both recite "said correction data being used to calculate true coordinates of the ball image." Therefore, Applicants representative questions whether the Examiner is relying on the pending claim set, and would like to discuss this matter further with the Examiner.

With specific regard to independent claim 6, the Examiner asserts that this claim is similar to claim 3 and therefore is also rejected in view of the Rankin and Yokota et al. references. However, independent claim 6 recites that the calculating section correct a coordinate error of only a ball image in the original image "made by a shift of a direction of the ball image from a direction of an optical axis of the CCD camera." The Examiner states in the present Office Action that this "would be included in the process of the correcting the object image distortion, as discussed in claim 3." However, Applicants do not see how the Examiner has arrived at this conclusion. In view of this, in addition to the above deficiencies of Yokota et al., Applicants representative would like to discuss this matter further with the Examiner. Specifically, Applicants representative would like to discuss the Examiner's position that this reference discloses calculating a coordinate error due to a shift of a direction of the ball image from a direction of the optical axis of the CCD camera as recited in claim 6.

With regard to dependent claims 2, 4, 5 and 7-10, Applicants respectfully submit that these claims are allowable due to respective dependence upon independent claims 1, 3 and 6, as well as due to the additional recitations in these claims.

In view of the above remarks, Applicants respectfully submit that claims 1-10 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the Examiner's rejections under 35 U.S.C. § 103 are respectfully requested.

CONCLUSION

Since the remaining references cited by the Examiner have not been utilized to reject the claims, but merely to show the state-of-the-art, no further comments are deemed necessary with respect thereto.

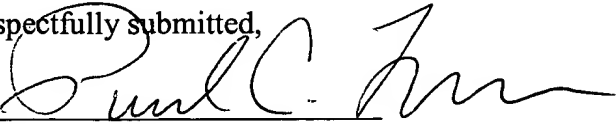
All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently pending rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Paul C. Lewis, Registration No. 43,368 at (703) 205-8000 in the Washington, D.C. area.

Dated: October 3, 2005

Respectfully submitted,

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Diepold

Attachments